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## NOTICE OF ALLOWANCE AND FEE(S) DUE

28554

7590

03/23/2010

Vierra Magen Marcus & DeNiro LLP 575 Market Street, Suite 2500 San Francisco, CA 94105 EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 03/23/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,069	09/27/2005	Peter David Ransome	NEXG-01004US0	6314

TITLE OF INVENTION: LOCAL AREA NETWORK UTITIZING MARCO AND MICRO DIVERSITY TECHNIQUES IN RECEIVING SIGNALS

FROM CELL SITES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	06/23/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

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						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	A	TTORNEY DOCKET NO.	CONFIRMATION NO.	
10/551,069	09/27/2005	•	Peter David Ransome	_	NEXG-01004US0	6314	
IITLE OF INVENTION FROM CELL SITES	N: LOCAL AREA NET	TWORK UTITIZING M	IARCO AND MICRO DI	VERSITY TECHNI	QUES IN RECEIVING	SIGNALS	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE F	EE TOTAL FEE(S) DU	E DATE DUE	
nonprovisional	YES	\$755	\$300	\$0	\$1055	06/23/2010	
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
BALAOING, ARIEL A		2617	370-334000				
1. Change of corresponde	ence address or indication	n of "Fee Address" (37	2. For printing on the pa	ntent front page, list			
CFR 1.363).  Change of correspo	ondence address (or Cha	nge of Correspondence	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,				
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or typ	e)			
PLEASE NOTE: Unle recordation as set forth	ess an assignee is ident in in 37 CFR 3.11. Comp	ified below, no assignee oletion of this form is NO	data will appear on the pa T a substitute for filing an a	tent. If an assignee	is identified below, the	document has been filed for	
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Publication Fee (N	o small entity discount p		Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of Copies			☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
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Authorized Signature				Date			
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This collection of informan application. Confident submitting the completed this form and/or suggestion 1450. Alexandria V	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DO	CFR 1.311. The informatic U.S.C. 122 and 37 CFR U.SPTO. Time will vary rden, should be sent to the	on is required to obtain or re 1.14. This collection is estive depending upon the indiving the Communion Office COMPLETED FORMS TO	etain a benefit by the mated to take 12 mir dual case. Any comi r, U.S. Patent and Tra D THIS ADDRESS	public which is to file (an nutes to complete, includ ments on the amount of the ademark Office, U.S. De SEND TO: Commissione	nd by the USPTO to process) ing gathering, preparing, and time you require to complete partment of Commerce, P.O. r for Patents, P.O. Box 1450.	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,069	09/27/2005	Peter David Ransome	NEXG-01004US0	6314
28554 7	590 03/23/2010		EXAMINER	
Vierra Magen Marcus & DeNiro LLP			BALAOINO	F, ARIEL A
575 Market Street	, Suite 2500		ART UNIT	PAPER NUMBER
San Francisco, CA	. 94105		2617	
			DATE MAILED: 03/23/2010	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 352 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 352 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	_
	10/551,069	RANSOME ET AL.	
Notice of Allowability	Examiner	Art Unit	_
	ARIEL BALAOING	2617	
The MAILING DATE of this communication appeal all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313 1.   ↑ This communication is responsive to amendments filed 01.	(OR REMAINS) CLOSED in or other appropriate communities. This application is subtraction and MPEP 1308.	this application. If not included nication will be mailed in due course. <b>THIS</b>	e
2. ☑ The allowed claim(s) is/are <u>1-5,13-16 and 22-29</u> .			
3.  Acknowledgment is made of a claim for foreign priority uner a)  All b)  Some* c)  None of the:  1.  Certified copies of the priority documents have 2.  Certified copies of the priority documents have 3.  Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.  A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give 5.  CORRECTED DRAWINGS (as "replacement sheets") must (a)  including changes required by the Notice of Draftspers 1)  hereto or 2)  to Paper No./Mail Date  (b)  including changes required by the attached Examiner' Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the company of the paper No./Mail Date	e been received. e been received in Application cuments have been received of this communication to file and the file of this application.  Initted. Note the attached EXAL es reason(s) why the oath or est be submitted. Son's Patent Drawing Review of the same of the file	in this national stage application from the a reply complying with the requirements  MINER'S AMENDMENT or NOTICE OF declaration is deficient.  ( PTO-948) attached  In the Office action of a drawings in the front (not the back) of a 1.121(d).  RIAL must be submitted. Note the	
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Su Paper No./N 7. ☐ Examiner's A	Mail Date Amendment/Comment Statement of Reasons for Allowance	

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### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/06/2010 has been entered.

# Allowable Subject Matter

- 2. Claims 1-5, 13-16, 22-29 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

The claims are allowed in view of applicant's submissions, remarks, and amendments filed 01/06/2010. Specifically, the prior art of record does not expressly disclose:

A communications network comprising:

two or more points of presence for communication with wireless terminals,
each point of presence represents a cell site, each point of presence having
multiple receive antennas which provide diversity reception of wireless signals at
the point of presence;

a central site having one or more controllers, the one or more controllers comprise a selection system, <u>the selection system carries out macro-diversity</u>

selection using a cell selector and micro-diversity selection using an antenna selector; and

a switch system through which receive signals from each of the multiple receive antennas of each point of presence are connected to the selection system, wherein based on analysis, at the selection system at the central site, of the receive signals from each of the multiple receive antennas of each point of presence: (a) the cell selector performs the macro-diversity selection to counter macro spatial effects in the communications network, and selects one of the points of presence from the two or more cell sites points of presence for reception from a particular wireless terminal, and (b) the antenna selector performs the micro-diversity selection to counter micro spatial effects in the communications network, and selects one of the receive antennas of the multiple receive antennas of the selected point of presence, such that the antenna selector selects a micro-diversity channel from each point of presence from among at least two micro-diversity channels from each point of presence, and the cell selector selects a macro-diversity channel from among the selected micro-diversity channels.

Although ISHIKAWA discloses macro and micro base stations and selection of both a macrocell and microcell, the macrocell differs from the point of presence claimed by the applicant. As disclosed a point of presence provide diversity reception at the point of presence which differs from the cell zoning and selection disclosed by ISHIKAWA. Furthermore, REED discloses the use of macro diversity and microdiversity reception (col. 1, line 20-28), however fails to disclose selecting a micro-

diversity channel from each point of presence from among at least two micro-diversity channels from each point of presence, and the cell selector selects a macro-diversity channel from among the selected micro-diversity channels.

Furthermore, SHPAK (US 2004/0162037) discloses access points **22** including multiple antennas **20**, **32** and PALLONEN (US 6,408,169 B1) discloses determination of antenna diversity at a base station, however neither teaches selecting a micro-diversity channel from each point of presence from among at least two micro-diversity channels from each point of presence, and the cell selector selects a macro-diversity channel from among the selected micro-diversity channels

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

SHPAK (US 2004/0162037 A1) – Multi-Channel WLAN transceiver with antenna diversity

PALLONEN (US 6,408,169 B1) – Selecting an antenna beam of a base station SAKAMOTO et al (US 2004/0258023 A1) – Switch and diversity hand-over processing

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WALTERS et al (US 6,112,058) – Confidence metric processing for bandwidth reduction

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARIEL BALAOING whose telephone number is (571)272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Paul Harper can be reached on (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617

/Ariel Balaoing/ Examiner, Art Unit 2617

/A. B./ Examiner, Art Unit 2617